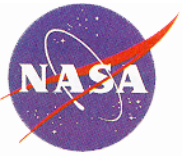# Level 2 Workshop

L2 Software Status

Sung-Yung Lee
And
Michael Gunson
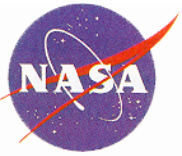
June 21, 20001
Pasadena, California

Level 2 Software Status
Topics for Discussion

- Input Processing
    - QA checking of Level 1b radiances
    - Flow control (eg. NO IR processing without I/R)
- Precipitation Flag
- M/W only retrieval
    - (Phil's update)
- Clear Flag Algorithms
- VIS processing
- Initial Cloud Clearing
- Initial Regression
- Initial Physical Retrieval
    - none-functional
- Final Cloud Clearing
- Final Retrieval

- Tuning
- Error Estimates

Level 2 Workshop

Miscellaneous Software

- Retrieval from Matchup files
    - At the final debugging stage
- Matchup File Format
    - Larry's concerns
- Types of matchup files
    - Ra Obs, ARM/CART, Buoy, AVN, Granule 401 type
- RTP file format and Status
- Tuning
- I/O routines
    - Swath/Grid/Point files used by AIRS project
    - IDL, C/Fortran, MatLab
    - Simulation (direct access binary file)

Team Exercise Schedule

- Clear Flad Test Exercise July ?, 2001
  - Cloud free radiances
  - Cloudy unbiased radiances
    - New local variability model
    - Include thin clouds by Larrabee's recipe?
    - How do we make the vis/NIR simulation consistent?
  - Retrievals as is?
- Tuning Test Exercise, August ?, 2001
  - Update bias - Larrabee's recipe?
  - Cloudy biased radiances
  - Retrievals without and with correction for bias
- Team Exercise October 8, 2001
  - Repeat objectives of last exercise
    - Bias estimation and recovery based on validation datasets
  - Utilize the TDS capabilities for production, archiving and retrieval

Tests & Schedule

- Cloud clearing
  - Characterization of pathological cases
  - Detection of such cases
- Test data sets needed
- Schedule for tests

Level 2 Workshop

Concerns

- CO2 climatology
  - Currently biased
  - Implication to tuning
- Correlated radiance error causes problem in the initial regression
- Error estimates needed for
  - Local Angle Correction
  - RTA fitting error
- Dynamic Radiance Error estimate
  - NeN from Calibration, not from the frequency table
- Radiance error induced by Cij error
  - Current plan calls for screening out worst cases.

Conclusions and Plans

- Action Items

- Plans before October (Nominally launch -2M)